<u>REMARKS</u>

Upon entry of the above amendment, claims 1-9 and 11-31 are pending in the application.

Of these claims, 1, 9, 12, 15, 19, 21, and 23-31 are independent. Applicant believes that no new

matter has been introduced by this Amendment. Reconsideration of the application in view of

the above amendments and following remarks is respectfully requested. A copy of the above

amendments showing deletions and insertions is attached to this Amendment (entitled

"Attachment 1").

Restriction Requirement

In the Office Action dated May 21, 2002, the Examiner imposed a restriction requirement.

The Examiner identified each of the alleged Inventions as follows:

I.   Claims 1-9, 11-20, 23, 24, 26, 27, and 29-31, drawn to producing difference image,

classified in class 382, subclass 130; and

II.   Claims 21, 22, 25, and 28, drawn to a method for determining the amount an image

is rotated or skewed, classified in class 382, subclass 289.

Applicant traverses this restriction. Applicant believes that the Examiner's grouping of

claims is incorrect. Specifically, Applicant disagrees with the Examiner's assertion that Group II is

drawn to a method for determining the amount an image is rotated or skewed. Claims 21, 22, 25,

and 28 are each directed to image processing methods, an image processing apparatus, and a

storage medium storing a program for carrying out an image processing method. These claims

have been amended to further clarify this point. In particular, these claims have been amended to

recite features involving the determination of a boundary line of the object area. Thus, these

claims are directed to the invention of Group I. Accordingly, Applicant requests reconsideration

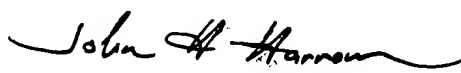and withdrawal of the restriction/election requirement.

Notwithstanding, the above discussion and traversal, Applicant hereby elects, with traverse,

Invention I, currently Claims 1-9, 11-20, 23, 24, 26, 27, and 29-31.

AUTHORIZATION

The Commissioner is hereby authorized to charge any fees which may be required for

filing this response to restriction requirement to Deposit Account No. 13-4500, Order No. 1232-

4532.

Respectfully submitted,

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Dated: June 21, 2002   By:_____

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ATTACHMENT 1

In this attachment, all additions are shown underlined (e.g., <u>the</u>), and deletions are shown in brackets (e.g., [the]).

IN THE CLAIMS:

Please note the following changes to claims 21, 22, 25, and 28:

21.   (Twice Amended)   An image processing method comprising:

a characteristic quantity calculation step of calculating characteristic quantities of image data;

an end point extraction step of extracting an end point of an object area in said image data from the characteristic quantities calculated in said characteristic quantity calculation step;

an end point storage step of storing coordinates of end points extracted in said end point extraction step;

a rotation angle indication step of indicating an angle of a rotation axis onto which the end points stored in said end point storage step are projected;

an accumulated quantity calculation step of calculating projection of the end points stored in said end point storage step onto said rotation axis of the angle indicated in said rotation angle indication step and calculating an accumulated quantity of said projection of the end points in a

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conditioned area on said rotation axis;

an accumulated quantity storage step of storing said accumulated quantity calculated in said accumulated quantity calculation step; and

[a rotation angle judgment step of judging a rotation angle] <u>a determination step of determining a boundary line</u> of the object area from said accumulated quantities stored in said accumulated quantity storage step.

22.   (Twice Amended)   A method according to Claim 21, wherein a [start point] <u>rotational center</u> of said rotation axis onto which the end points stored in said end point storage step are projected is placed at a barycenter of image data not less than a predetermined density value.

25.   (Twice Amended)   An image processing apparatus comprising:

characteristic quantity calculation means for calculating [said] characteristic quantities of image data;

end point extraction means for extracting an end point of an object area in said image data from the characteristic quantities calculated by said characteristic quantity calculation means;

end point storage means for storing coordinates of end points extracted by said end point extraction means;

rotation angle indication means for indicating an angle of a rotation axis onto which the

end points stored in said end point storage means are projected;

accumulated quantity calculation means for calculating projection of the end points stored in said end point storage means onto said rotation axis of the angle indicated by said rotation angle indication means and calculating an accumulated quantity of said projection of the end points in a conditioned area on said rotation axis;

accumulated quantity storage means for storing said accumulated quantity calculated by said accumulated quantity calculation means; and

[rotation angle judgment means for judging a rotation angle] determination means for determining a boundary line of the object area from said accumulated quantities stored in said accumulated quantity storage means.

28.   (Twice Amended)   A computer-readable storage medium storing a program for carrying out an image processing [routine comprising] method, the method comprising the steps of:

a characteristic quantity calculation step of calculating characteristic quantities of image data;

an end point extraction step of extracting an end point of an object area in said image data from the characteristic quantities calculated in said characteristic quantity calculation step;

an end point storage step of storing coordinates of end points extracted in said end point extraction step;

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a rotation angle indication step of indicating an angle of a rotation axis onto which the end points stored in said end point storage step are projected;

an accumulated quantity calculation step of calculating projection of the end points stored in said end point storage step onto said rotation axis of the angle indicated in said rotation angle indication step and calculating an accumulated quantity of said projection of the end points in a conditioned area on said rotation axis;

an accumulated quantity storage step of storing said accumulated quantity calculated in said accumulated quantity calculation step; and

[a rotation angle judgment step of judging a rotation angle] a determination step of determining a boundary line of the object area from said accumulated quantities stored in said accumulated quantity storage step.

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